

## SCIENTIFIC SERVICES

**postal** Private Bag X5014 Stellenbosch 7599  
**physical** Assegaaibosch Nature Reserve Jonkershoek  
**website** [www.capenature.co.za](http://www.capenature.co.za)  
**enquiries** Alana Duffell-Canham  
**telephone** +27 21 866 8000 **fax** +27 21 866 1523  
**email** [aduffell-canham@capenature.co.za](mailto:aduffell-canham@capenature.co.za)  
**reference** SSD14/2/6/1/8/4/188rem(6)\_Ind\_GasTurbine  
**date** 15 June 2015

Engela Grobler / Johan Botha  
AGES Limpopo (Pty) Ltd

By email: [egrobler@ages-group.com](mailto:egrobler@ages-group.com) / [jbotha@ages-group.com](mailto:jbotha@ages-group.com)

Dear Ms Grobler / Mr Botha

**Re: Proposed energy generation facility for a combined gas cycle turbine (CGCT) power plant on a portion of the remainder of the Farm Langeberg 188, Saldanha Bay (Vortum thermal power plant and power line).**  
DEA&DP ref: TBA

CapeNature would like to thank you for the opportunity to comment on this proposed activity. Note that our comments pertain specifically to impacts on biodiversity and not to the overall desirability of the development and visual impacts. Please also refer to our standard letter (attached) which outlines information which must be considered in the EIA reports and our requirements for commenting.

### General:

1. Ecosystem threat status tells us about the degree to which ecosystems are still intact or alternatively losing vital aspects of their structure, function and composition, on which their ability to provide ecosystem services ultimately depends. National figures reflecting the proportion of each ecosystem type remaining in good ecological condition, and supporting the list of threatened ecosystems published in 2011 under NEMBA, are based on land cover datasets primarily derived from satellite imagery taken in 1994-95 or 2000-2001<sup>1</sup>. This means that, in some instances, the most current National ecosystem threat statuses are based on conditions which have changed considerably. More recent land cover informants do exist with which to assess habitat loss. Further, SANBI has released an update of the 2006 South African Vegetation Map (Mucina and Rutherford), which aims to provide floristically based vegetation units at a greater level of detail than had been available before. Thus, in an effort to utilize best available science (including the abovementioned land cover and ecosystem

<sup>1</sup> The South African National Land-Cover Dataset 1994 (NLC 94; Fairbanks *et al.*, 2000) and the South African National Land-Cover Dataset 2000 (NLC 2000; Van den Berg *et al.*, 2008), respectively.

mapping datasets) and to generate figures which more accurately reflect the current degree of habitat loss in the Western Cape, CapeNature has recently produced updated provincial ecosystem status statistics in accordance with the National principles, criteria, and approach<sup>2</sup>.

2. The proposed development site and most of the power line route is located within an area covered by Saldanha Flats Strandveld (a small section of the power line route runs through Hopefield Sand Fynbos). Thus, the key findings relevant to this application show that under criterion A1 Saldanha Flats Strandveld, which has less than 36% of its original extent remaining, meets the criteria for listing as **Endangered** in terms of Section 52 of the Biodiversity Act. Hopefield Sand Fynbos can be considered Vulnerable under the same criterion.
3. Cumulative loss of both these vegetation types in the Saldanha region due to the many existing and proposed developments is of very high concern.

#### Thermal Power Plant Site:

4. The proposed site for the power plant is located on a site historically covered by Saldanha Flats Strandveld. However, it appears that much of the site has been previously cultivated and very little natural vegetation is remaining. This site is thus of low concern from a botanical perspective. Note that we are basing our opinion on a desk-top assessment of the site as indicated in the map provided with the BID (indicating the site on the western side of the R27). If the location indicated is correct then, according to our cadastral information, the power plant site is located in portion 6 of Farm Langeberg No. 188.
5. Note that an assessment of potential impacts on groundwater should be undertaken as the site does overlie the Langebaan Road Aquifer System (LRAS).

#### Power line Route:

6. We note that the power plant will require one or more 400kV power lines to transmit electricity to Aurora substation. Linear activities such as power lines and roads are cumulatively contributing significantly to loss of natural habitat in the Saldanha region and routes should aim to avoid sensitive areas. Even though power line corridors are mostly brush-cut (mowed) and not completely stripped, the brush-cutting activity favours the regrowth of certain species over others leading to loss of diversity and fragmentation.
7. The first section of power line crossing portion 1 of Farm 189 is of concern as it will impact on an area determined as Critical Biodiversity Area (CBA) which is known to contain several Species of Conservation Concern (SCC). The section of power line running south through the remainder of Farm 189 is also of concern for similar reasons. Alternative routes for the power line must be put forward and assessed by a botanical specialist who has experience working in the habitats in this area.
8. Impacts of additional power lines on avifauna must also be assessed by a qualified avifaunal specialist.

We will provide additional comments once the Draft Scoping and Environmental Impact reports and associated specialist studies have been provided.

---

<sup>2</sup> Government Gazette 34809, No. 1002. National list of ecosystems that are threatened and in need of protection. National Environmental Management: Biodiversity Act, 9 December 2011.

CapeNature reserves the right to revise initial comments and request further information based on any additional information that may be received.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Alana Duffell-Canham', with a long, sweeping horizontal stroke extending to the right.

Alana Duffell-Canham  
For: Manager (Scientific Services)



## Engela Grobler

---

**From:** Johan Botha <jbotha@ages-group.com>  
**Sent:** 16 June 2015 09:45 AM  
**To:** 'Alana Duffell-Canham'  
**Cc:** 'egrobler@ages-group.com'  
**Subject:** RE: Proposed energy generation facility for a combined gas cycle turbine (CGCT) power plant on a portion of the remainder of the Farm Langeberg 188, Saldanha Bay

Dear Alana

Thank you for your very valuable comments that will assist to determine the scope of work for the specialist studies.

The power line alternatives are very limited because of the Langebaan Air Force Base and that is why the preferred option will be to put it alongside the existing lines. We will address cumulative impacts and also make sure there is not a better alternative with less impact on the environment.

Kind regards

**Johan Botha**  
Senior Environmental  
Scientist

*Pri.Sci.Nat  
M.Sc.Environmental Management*

Cell:083 644 9957

---

### AGES LIMPOPO (PTY) LTD



**Limpopo Office**  
120 Marshall Street  
Polokwane, 0699  
Tel: +27 15 291 1577  
Fax: +27 15 291 1577  
[www.ages-group.com](http://www.ages-group.com)

Reg. no.: 2006/020831/07  
VAT no.: 4060 190 362



*Disclaimer: The views expressed in this email are, unless otherwise stated, those of the author and not of AGES or its management. The information is confidential and is intended solely for the addressee. All reasonable steps are taken to insure the accuracy, integrity and confidentiality of information. No liability or responsibility is accepted if information is corrupted or does not reach its intended destination.*

---

**From:** Alana Duffell-Canham [mailto:aduffell-canham@capenature.co.za]  
**Sent:** 15 June 2015 01:33 PM  
**To:** egrobler@ages-group.com; jbotha@ages-group.com  
**Subject:** Re: Proposed energy generation facility for a combined gas cycle turbine (CGCT) power plant on a portion of the remainder of the Farm Langeberg 188, Saldanha Bay

Dear Engela and Johan

Please find initial comment from CapeNature attached.

## Engela Grobler

---

**From:** Alana Duffell-Canham <aduffell-canham@capenature.co.za>  
**Sent:** 23 October 2015 02:42 PM  
**To:** Engela Grobler  
**Subject:** RE: Vortum Solar Park

Dear Engela

Your email has been received and noted.

Kind regards,  
Alana

**Alana Duffell-Canham**  
Scientist: Land-use



tel +27 21 866 8029 | fax +27 21 866 1523 | cell +27 082 727 2691  
email [aduffell-canham@capenature.co.za](mailto:aduffell-canham@capenature.co.za) | fax2email +27 86 529 3475  
postal Private Bag x5014 Stellenbosch 7599  
physical Assegaaibosch Nature Reserve Jonkershoek Road Stellenbosch  
[www.capenature.co.za](http://www.capenature.co.za)

---

---

**From:** Engela Grobler [mailto:[egrobler@ages-group.com](mailto:egrobler@ages-group.com)]  
**Sent:** 23 October 2015 11:50 AM  
**To:** [aduffell-canham@capenature.co.za](mailto:aduffell-canham@capenature.co.za)  
**Subject:** Vortum Solar Park

Dear Alana,

With reference to correspondence from your office with regard to the proposed Vortum Thermal Power Plant, please note that I have the reference numbers you requested.

Please note that the National Department of Environmental Affairs (DEA) is the Competent Authority and the Western Cape Department of Environmental Affairs and Development Planning (WC DEA & DP) is the Commenting Authority with their reference numbers as follows:

DEA: 14/12/16/3/3/2/827

WC DEA & DP: 16/3/3/6/6/1/F4/18/3254/15

With reference to specific comments you sent on the Background Information Document and the scoping report, please note that most of these issues have not been addressed in the Scoping Report. However, it has been forwarded to the applicable specialist and it will be taken into consideration with the compiling of the EIA Report.

Kindly confirm receipt of this e-mail.

Best Regards

Engela Grobler



**Western Cape  
Government**

Transport and Public Works

**ROAD NETWORK MANAGEMENT**

Email: Grace.Swanepoel@westerncape.gov.za

tel: +27 21 483 4669

Rm 335, 9 Dorp Street, Cape Town, 8001

PO Box 2603, Cape Town, 8000

2015 -07- 24

**REFERENCE: 13/3/5/1-24/114 (Job 20525)**

**ENQUIRIES: Ms GD Swanepoel**

**DATE: 6 July 2015**

The Director  
AGES (Pty) Ltd  
PO Box 2526  
**POLOKWANE**  
0700

Attention: Ms E Grobler

Dear Madam

**APPLICATION FOR ENVIRONMENTAL AUTHORISATION: COMBINED CYCLE GAS TURBINE  
POWER PLANT ON PORTION OF UNREGISTERED FARM 188/6, DIVISION MALMESBURY:  
SALDANHA BAY MUNICIPAL AREA: TRUNK ROADS 77/1 AND 85/1**

1. The following refer:-
  - 1.1. Your unreferenced letter dated 4 June 2015 addressed to the District Roads Engineer, Ceres and
  - 1.2. This Branch's letter 13/3/5/1-24/114 (Job 20525) dated 29 October 2013.
2. Please register this Branch as an Interested and Affected Party. The adjudication of applications will be expedited should they be addressed directly to this Branch and not via Ceres.
3. Comment is required on a Background Information Document for a proposed energy generating facility for a combined cycle gas turbine (CCGT) power plant on a  $\pm 130$ ha portion of unregistered Farm 188/6, division Malmesbury. The footprint of the plant will be  $\pm 80$ ha.
4. This Branch, the Road Authority of Trunk Road 77/1 and Trunk Road 85/1 adjacent to the development, has the following initial comments:-
  - 4.1 Trunk Road 77/1 (TR77/1) with a proclaimed width of 60m will be affected between Km 117,1 and  $\pm$ Km 119,7 by the proposed development;
  - 4.2 Trunk Road 85/1 (TR85/1) with a current proclaimed width of 40m will be affected between Km 0,0 and  $\pm$ Km 0,45 by the proposed development. This road reserve width is in the process of being widened;

- 4.3 In terms of Section 9A of Act 21 of 1940 (Ribbon Development Act), 500m building restriction lines are applicable as measured from the centre line of the intersections of all trunk, main and divisional roads as well as where these roads intersect with any other road. In regard to this current submission, this 500m building restriction is applicable to the intersection of TR77/1 with TR85/1;
- A grade separated interchange is in the planning stage for this intersection
- 4.4 In terms of Section 9 of Act 21 of 1940 (Ribbon Development Act) there is a 95m building restriction line along TR77/1 as measured from the centre line of the road reserve;
- 4.5 In terms of Section 17 of Roads Ordinance 19 of 1976, there is a statutory 5m building line applicable along all proclaimed roads. The 5m is measured from the statutory boundary of the above two roads;
- 4.6 In terms of Roads Ordinance 19 of 1976 no new accesses may be built or existing access layouts or access uses changed without the approval of this Branch. Approval is also required for any temporary access road during the construction process;
- No direct access will be permitted to the development from either TR77/1 or TR85/1
  - Access to the development shall be via the internal road network of the industrial area
  - The internal road network of the industrial area will gain access to the proclaimed provincial road network at  $\pm$ Km 3,4 on TR85/1
- 4.7 It is proposed that a west to east internal road for the industrial area will pass through the northern part of unregistered Farm 188/6 and then continue via an underpass under TR77/1 to provide access to the remainder of Farm 188 on the eastern side of TR77/1 and
- 4.8 A traffic study by competent traffic engineers will be required for the construction phase of the project.
5. As this Branch is not opposed to the proposed development, it will comment in detail during the Land Use Ordinance application stage.

Yours faithfully



**ML WATTERS**  
For **CHIEF DIRECTOR: ROAD NETWORK MANAGEMENT**





**Western Cape  
Government**

Environmental Affairs and  
Development Planning

Directorate: Development Management  
Region 1

**REFERENCE NUMBER:** 16/3/3/6/6/1/F4/18/3254/15  
**ENQUIRIES:** MS. K. ADRIAANSE

**DATE OF ISSUE:** 17 AUG 2015

AGES (Pty) Ltd.  
P.O. Box 2526  
**POLOKWANE**  
0700

**For Attention: Ms. E. Grobler**

Tel & Fax: (015) 291 1577

Dear Madam

**ACKNOWLEDGEMENT: THE BACKGROUND INFORMATION DOCUMENT FOR THE PROPOSED DEVELOPMENT OF A COMBINED CYCLE GAS TURBINE POWER PLANT AND ASSOCIATED INFRASTRUCTURE ON A PORTION OF THE REMAINDER OF FARM LANGEBOEG NO. 188, SALDANHA BAY, WESTERN CAPE PROVINCE.**

The Background Information Document dated 03 June 2015 and received by the Department on 07 August 2015, refers.

1. This letter serves as an acknowledgement of receipt of the aforementioned document by this Directorate.
2. Having considered the information contained in the abovementioned document, this Directorate hereby confirms the following:
  - 2.1. This Directorate will be a commenting authority and will therefore provide comment in the Environmental Impact Assessment process; and
  - 2.2. Copies of all documents submitted to the Department of Environmental Affairs must concurrently be submitted to this Directorate for commenting and record purposes.
3. You are required to quote the abovementioned reference number in any future correspondence in respect of the application.



This Department reserves the right to revise or withdraw comments or request further information based on any information received.

Your interest in the future of our environment is greatly appreciated.

Yours faithfully

  
\_\_\_\_\_  
**HEAD OF DEPARTMENT**

Copy to: Ms. M. Rabothata (Department of Environmental Affairs: Environmental Impact Evaluation)

Fax: (012) 399 9372

**WESKUS DISTRIKSMUNISIPALITEIT  
WEST COAST DISTRICT MUNICIPALITY**

Rig alle korrespondensie aan:  
Address all correspondence  
to:

**MUNISIPALE BESTUURDER/  
MUNICIPAL MANAGER**

Navrae/Enquiries : P Fabricius  
Verw.Nr./Ref. No.: 15/2/3/5/1



Posbus / P O Box 242  
MOORREESBURG, 7310

Telefoon/Phone (022) 433 8400  
Faks/Fax Nr. 086 6926 113

E-Mail Adres/Address :  
westcoastdm@wcdm.co.za

29 May 2015

The Environmental Assessment Practitioner  
AGES (Pty) Ltd  
PO Box 2526  
POLOKWANE  
0700

Via email: [jbotha@ages-group.com](mailto:jbotha@ages-group.com) & [egrobler@ages-group.com](mailto:egrobler@ages-group.com)

Dear Sir / Madam,

**NOTICE OF ENVIRONMENTAL IMPACT ASSESSMENT PROCESS: VORTUM  
ENERGY (PTY) LTD, PORTION OF THE REMAINDER OF THE FARM LANGEBOEG  
188, SALDANHA BAY MUNICIPAL AREA.**

As per the advertisement in the Weslander local newspaper of 28 May 2015 please register the West Coast District Municipality as commenting authority with regards to the application for Environmental Authorisation.

With regards to licensing in terms of the National Environmental Management: Air Quality Act it is important to note that the West Coast District Municipality is the competent authority.

Please provide this office with the Background Information Document (BID) and cc D Kotze: [dkotze@wcdm.co.za](mailto:dkotze@wcdm.co.za)

Yours faithfully

  
MUNICIPAL MANAGER  
/PF

## Engela Grobler

---

**From:** Engela Grobler <egrobler@ages-group.com>  
**Sent:** 29 May 2015 12:47 PM  
**To:** 'westcoastdm@wcdm.co.za'  
**Cc:** 'dkotze@wcdm.co.za'  
**Subject:** Vortum Energy - Saldanha  
**Attachments:** Vortum Thermal Power Plant - BID.pdf; RESPONSE FORM.docx

Tracking:	Recipient	Read
	'westcoastdm@wcdm.co.za'	
	'dkotze@wcdm.co.za'	Read: 2015/05/29 01:34 PM

FOR ATTENTION: P. FABRICIUS  
REF NO.: 15/2/3/5/1

Dear Sir,

Please find attached the Background Information Document as requested.

You have been registered in a register created for the purpose of the public participation process.

It is not necessary to complete the attached form but you are welcome to do so if you want to.

Best Regards

Engela Grobler  
Environmental Assessment Practitioner  
(M.Sc. Stellenbosch)



**Limpopo Office**  
120 Marshall Street  
Polokwane, 0699  
Tel: +27 15 291 1577  
Fax: +27 15 291 1577  
[www.ages-group.com](http://www.ages-group.com)

Reg. no.: 2006/020831/07  
VAT no.: 4060 190 362





## water & sanitation

Department:  
Water and Sanitation  
REPUBLIC OF SOUTH AFRICA

### WESTERN CAPE PROVINCIAL OPERATIONS

Private Bag X16, Sanlamhof, 7532  
52 Voortrekker Road, Bellville, 7530

2015-07-24

☎ 021 941 6140  
☎ 021 941 6077  
💻 [Ndobenin2@dwa.gov.za](mailto:Ndobenin2@dwa.gov.za)

✉ Ms. N. Ndobeni  
📁 16/2/7/G10M/A/11

AGES (Pty) Ltd  
P. O. Box 2526  
**POLOKWANE**  
0700

**ATTENTION:** Ms Engela Grobler

### BACKGROUND INFORMATION DOCUMENT FOR PROPOSED ENERGY GENERATION FACILITY FOR A COMBINED CYCLE GAS TURBINE (CCGT) POWER PLANT ON A PORTION OF THE REMAINDER OF THE FARM LANGEBOER 188, SALDANHA BAY

Reference is made to the above-mentioned document dated 03 June 2015 with your reference number L15047E.

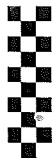
Upon receipt of the Environmental Impact Assessment Report, the Department will be in a position to provide insightful and conclusive comments for the proposed project.

Please do not hesitate to contact the above official should there be any queries.

Yours faithfully

*M. K. Strauss*  
n9 **PROVINCIAL HEAD: WESTERN CAPE**  
**DATE:** 3 July 2015



**Western Cape  
Government**Environmental Affairs and  
Development PlanningDirectorate: Development Management  
Region 1**REFERENCE NUMBER:** 16/3/3/6/6/1/F4/18/3254/15  
**ENQUIRIES:** MS. K. ADRIAANSE**DATE OF ISSUE:** 17 AUG 2015AGES (Pty) Ltd.  
P.O. Box 2526  
**POLOKWANE**

700

**For Attention: Ms. E. Grobler**

Tel &amp; Fax: (015) 291 1577

Dear Madam

**ACKNOWLEDGEMENT: THE BACKGROUND INFORMATION DOCUMENT FOR THE PROPOSED DEVELOPMENT OF A COMBINED CYCLE GAS TURBINE POWER PLANT AND ASSOCIATED INFRASTRUCTURE ON A PORTION OF THE REMAINDER OF FARM LANGEBOEG NO. 188, SALDANHA BAY, WESTERN CAPE PROVINCE.**

The Background Information Document dated 03 June 2015 and received by the Department on 07 August 2015, refers.

1. This letter serves as an acknowledgement of receipt of the aforementioned document by this Directorate.
2. Having considered the information contained in the abovementioned document, this Directorate hereby confirms the following:
  - 2.1. This Directorate will be a commenting authority and will therefore provide comment in the Environmental Impact Assessment process; and
  - 2.2. Copies of all documents submitted to the Department of Environmental Affairs must concurrently be submitted to this Directorate for commenting and record purposes.
3. You are required to quote the abovementioned reference number in any future correspondence in respect of the application.

This Department reserves the right to revise or withdraw comments or request further information based on any information received.

Your interest in the future of our environment is greatly appreciated.

Yours faithfully

  
\_\_\_\_\_  
**HEAD OF DEPARTMENT**

Copy to: Ms. M. Rabothata (Department of Environmental Affairs: Environmental Impact Evaluation)

Fax: (012) 399 9372